Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

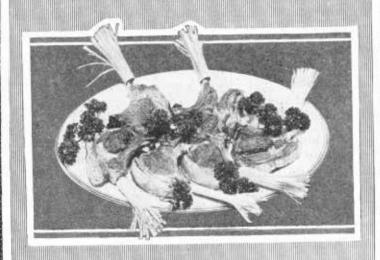


U.S. DEPARTMENT OF AGRICULTURE

FARMERS' BULLETIN No. 1172 has

Rev. ed

FARM SLAUGHTERING AND USE OF LAMB and MUTTON





THE PRODUCTION of sheep for wool alone is rapidly on the wane in the United States. More and more emphasis is being placed on the production of lamb and mutton for the table. The future success of this industry will depend upon a strong, steady market, based upon an increasing consumption.

Less than 4 per cent of the meat consumed by the average American for the last five years was lamb or mutton. This proportion should be much larger, as mutton and lamb are among the most healthful, nutritious, and palatable of meats.

The ease with which sheep and lambs are slaughtered on the farm and the comparatively small size of the carcass make them a most convenient form of fresh meat for family use and for summer killing. The meat can also be cured for future use.

This bulletin contains a discussion of the methods employed in slaughtering the animal, cutting up the carcass, and curing the flesh; also recipes for cooking the meat.

Washington, D. C.

Issued December, 1920; revised March, 1925

FARM SLAUGHTERING AND USE OF LAMB AND MUTTON.

By C. G. Potts, Animal Husbandman, Animal Husbandry Division, Bureau of Animal Industry.

CONTENTS.

	Page.		Page.
Use of mutton in the diet	3	Cutting up the carcass.	. 13
Reason for limited use		Cutting up a lamb carcass	. 15
The flavor of mutton	4	Home curing of mutton	. 16
Why more mutton and lamb should be used.	5	Brine-cured meat	. 17
Slaughtering and dressing sheep	6		19
Care of the carcass	12	Recipes for cooking mutton and lamb	. 20

USE OF MUTTON IN THE DIET.

EARLIEST records mention the use of the flesh of sheep for human food. The extent of its use, however, has varied at different times, in different countries, and even in different sections of the same country at the same time. Thus, although the United States as a whole does not use mutton and lamb extensively, a large quantity is used in a narrow section along the Atlantic seaboard north of the Potomac River.

Figures compiled in the Bureau of Animal Industry, United States Department of Agriculture, indicate that during the five years, 1919–1923, only 3.7 per cent of the meat consumed in the United States was mutton and lamb. The average yearly meat bill (dressedmeat basis) of the American consumer during that period contains the following items:

T1 1 11	Pounds.
Lamb and mutton	5. 4
Beef and veal	67.7
Pork (excluding lard)	75.6
Total annual meat consumption per capita	149 7

These figures show the proportion of lamb and mutton to other meats to be very small, and are more remarkable in view of the fact that much of this rather small percentage is consumed in the Eastern States. The sectional popularity of mutton and lamb may be seen in figures compiled from the department's estimates of sectional meat consumption.

In the East 1 pound of mutton and lamb is used for every 5 pounds of beef, in the South the ratio is 1 to 10, in the West it is 1 to 12, and in the Central or Corn-Belt States it is 1 to 20.

REASON FOR LIMITED USE.

The reason for the limited use of lamb and mutton throughout the central section of the United States probably had its origin in the days of the development of the great Corn-Belt region west of the Appalachian Mountains. At that time the sheep owned by the settlers of that region came largely from the North Atlantic States and had been developed almost without exception for wool production, regardless of the inherent flavor of the meat. The flesh of these animals was no doubt tough, not so palatable as other meats, and, possibly, owing to the crude methods of caring for it, much of it was unfit for use. And besides, the number being limited, it was necessary to retain the animals in order to have enough wool for warm clothing.

As this section of the country has been somewhat slower in the development of mutton breeds of sheep, and as much prejudice against the meat has been handed down from one generation to another, there has developed the idea that the flesh of all sheep is not appetizing and carries peculiar flavors, an opinion which a large percentage of the people never try to substantiate or disprove.

Furthermore, there is a feeling that the task of butchering a sheep is exceptionally difficult and that it can be accomplished only by some one expert in the work.

THE FLAVOR OF MUTTON.

There is a characteristic taste in cooked mutton and lamb, due to the chemical contents of the meat fat, that makes it easy to distinguish from other kinds of meat. The same is true of beef, chicken, venison, or rabbit. Eastern consumers have a liking for the peculiar flavor of mutton and lamb, and the trade has been able to sell the meat at fancy prices in that section.

Much has been said and written of the so-called "woolly flavor" of mutton and it was with a view of determining the cause and if possible the means of elimination, either in cooking or butchering, that experimental work was conducted by the Bureau of Animal Industry in collaboration with the Office of Home Economics.

These experiments included tests, as outlined below, of the most common theories advanced for the objectionable taste that occasionally occurs in mutton and lamb.

- (1) Parts of carcasses were brought in contact with wool and permitted to stay in this position 30 minutes. They were then cooked and compared with similar parts of the same carcass treated in the ordinary way.
- (2) Carcasses were permitted to stand and develop gas before the entrails were removed, and compared with others of the same breed and age as to the flavor and texture.

- (3) The fell (or external layer of muscular tissue) was removed from some portions of carcasses and these compared with other similar portions of the same carcass and from which the fell had not been removed.
- (4) Tests were made at frequent intervals on different portions of the same carcass and a check kept on the taste and texture of the meat.
- (5) Comparative tests were made of sheep and lambs of different ages to note the effect of the age of the animal upon the taste.

Comparative tests were made of wool and mutton breeds to note the effect of breeds upon flavor and texture.

In only two cases was anything approaching a disagreeable flavor noted. One of these was in a rather fat part of a carcass that had been stewed and was partially cooled when sampled. This was killed in the regular way and should not have shown the flavor.

The other case of strong flavor was apparent in chops kept 10 days in the cooler and kept to the verge of spoiling, outside, before cooking. This taste was most pronounced in the outer layer of fat and was no doubt due to some chemical change which had taken place in that portion of the meat.

In some cases, when the meat was cooked without removing the fell, the latter when tasted separately was less pleasant than the meat itself.

It can not be denied that in rare cases meat sold as lamb or mutton has an objectionable taste. This may be due to the fact that the carcass was in reality that of an old ram or goat. Holding the meat for a long time, particularly in the presence of odors of decaying vegetables or other matter, may also cause an unpleasant taste. Leaving the fell on the cooked meat also increases the possibility of the undesirable taste developing.

With reasonably careful slaughtering and caring for the lamb or mutton carcass, as described in the following pages, there is a practical certainty of having wholesome, appetizing, and economical meat for family use.

WHY MORE MUTTON AND LAMB SHOULD BE USED.

Possibly the first reason for urging the more extensive use of mutton and lamb may be found in the nature of the sheep industry itself. The old method of raising sheep for wool alone is rapidly on the wane in the United States. The method developed in the last decade in the farm States is rapidly increasing. This industry is being conducted for the production of both wool and lambs, and as the increased production of wool is essential to the normal development of the country, it is necessary that a market for the meat be developed in proportion to the increase in the production.

Food Value.—The fact that mutton and lamb are well liked, easily digested, rank well with other meats as regards nutritive value, and

are palatable, wholesome, and usable in many ways has long been known. The following table shows the percentage composition and fuel value per pound of lamb, mutton, and some other meats:

Average	Composition	of	Meats.
---------	-------------	----	--------

Protein.	Fat.	Water.	Refuse.	Fuel value per pound.
Per cent.	Per cent.	Per cent.	Per cent.	Calories.
15. 4	19. 1	45. 5	19. 1	1,075
15. 9	13. 6	52. 9	17.4	860
12.3	24.5	41. 6	21.2	1, 235
	23. 2	45. 4	17.2	1, 210
				,
15. 1	6. 0	54. 2	24.5	535
	6. 6	56. 2	20.7	580
		-		
14.5	17.5	49.1	18. 7	995
	18. 3	50.4	15. 7	1,045
				,
13. 5	25. 9	48.0	10.7	1,320
	29.8	44. 9	12.4	1, 450
	Per cent. 15. 4 15. 9 12. 3 13. 8 15. 1 16. 2 14. 5 15. 4 13. 5	Per cent. 15.4 19.1 15.9 13.6 12.3 24.5 13.8 23.2 15.1 6.0 16.2 6.6 14.5 17.5 15.4 18.3 13.5 25.9	Per cent. 15.4 19.1 45.5 15.9 13.6 52.9 12.3 24.5 41.6 13.8 23.2 45.4 15.1 6.0 54.2 16.2 6.6 56.2 14.5 17.5 49.1 15.4 18.3 50.4 13.5 25.9 48.0	Per cent. Per cent. Per cent. Per cent. Per cent. 19. 1 19. 1 15. 9 13. 6 52. 9 17. 4 12. 3 24. 5 41. 6 21. 2 13. 8 23. 2 45. 4 17. 2 15. 1 6. 0 54. 2 24. 5 16. 2 6. 6 56. 2 20. 7 14. 5 17. 5 49. 1 18. 7 15. 4 18. 3 50. 4 15. 7 13. 5 25. 9 48. 0 10. 7

The table above is from Farmers' Bulletin 142, Principles of Nutrition and Nutritive Value of Food.

Freedom from disease.—The fact that a smaller percentage of sheep carcasses as compared with those of other commonly used domestic animals is condemned under the Government meat inspection still furthers the opinion that mutton and lamb are the most wholesome of meats and should be in more general use.

Because of the foregoing evidence and the fact that mutton provides a convenient source of fresh meat in sections where beef is unobtainable most seasons of the year, the following directions for the farm butchering of sheep have been prepared.

SLAUGHTERING AND DRESSING SHEEP.

Equipment.—The only equipment necessary for butchering a sheep is a knife for sticking and skinning, a steel or stone to sharpen the knife, a place to hang the animal up, and a clean place in which to work. This last may be a killing box, a low platform, table, or a tough, heavy sod, sloping so that the blood will drain away from the slaughtered animal.

Condition of animal.—The animal should be in good flesh but not too fat. It should be healthy, in perfectly normal condition, and not be excited before killing. Care should be taken never to strike the animal or catch it by the wool, as either will leave ugly bruises on the carcass.

It should be kept off feed, both grain and roughage, for at least 18 hours before slaughter, to prevent development of gases in the

stomach and intestines, thus lessening the danger of cutting them when the entrails are removed. Free access to water before killing is desirable, as it facilitates the slipping of the skin.

Sticking.—The animal is caught and laid on its back. The two front feet are bent back while the left hind leg is brought forward. The three feet are tied together. The animal is then laid on its left

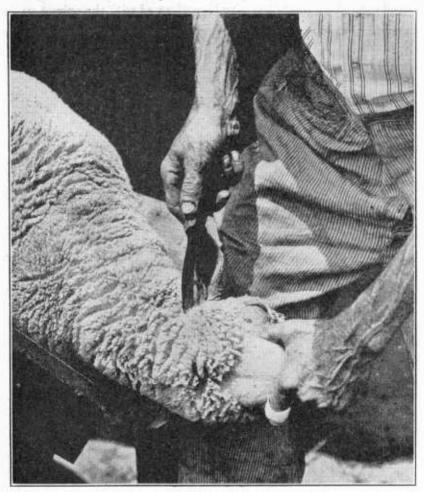


Fig. 1.—Sticking the animal.

side and the nose grasped with the left hand. The knife is stuck into the neek a little below the right ear and just back of the jaw-bone. (Fig. 1.)

A sharp, thin-bladed knife should be used and thrust completely through the neck. The sharp edge should be outward. The under portion of the neck can then be completely severed with an upward and outward motion.

Stunning.—The neck is then immediately grasped with the right hand just back of the incision and by a quick pressure with the left hand on the nose the neck is broken over the edge of the box (fig. 2), stunning the animal and facilitating the thorough bleeding out of the carcass.

Skinning.—After the sheep has thoroughly bled, it is ready to be legged out. This operation may be performed with the animal on the

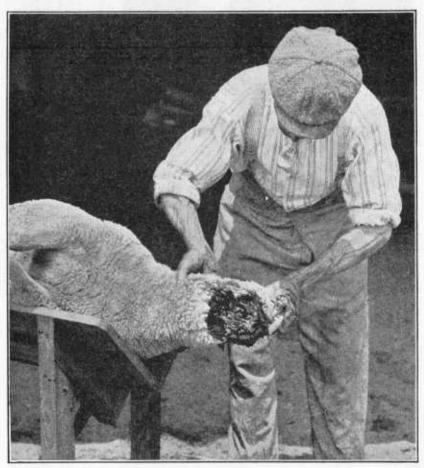


Fig. 2.—Stunning the sheep.

ground or by the operator climbing on the platform. The foot is held between the butcher's knees and the skin on the upper foreleg grasped with the left hand. If care is used a narrow strip can be run down to the foot (fig. 3), where the joint is severed. After the other leg has been similarly treated, the skin is opened across the breast and removed from each side of the neck, the knife being used in the operation. It is then fisted off over each side of the brisket and back of the

forelegs (fig. 4). This same method is used in removing the skin from the forearm, after which it can be easily stripped from the rest of the leg.

Following this the throat is slit and the gullet (esophagus) removed. The outer or fleshy part of this should be broken by draw-

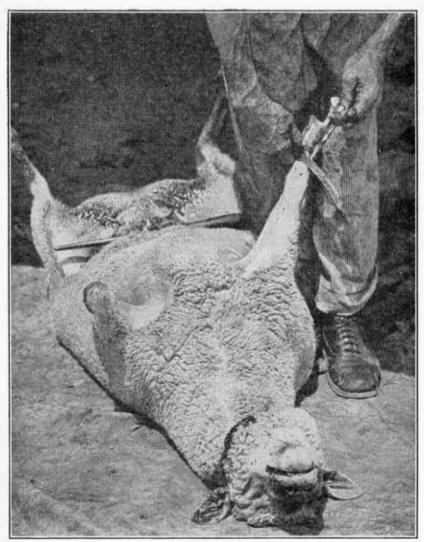


Fig. 3 .- Opening the skin.

ing it between the thumb and back edge of the knife. It can then be tied so that no material or gas can escape from the stomach (fig. 5).

The hind legs are legged out in much the same way as the forelegs. A strip of skin is removed from the rear of the leg from a point near 93915°—28——2

the body to the foot. (Fig. 6.) The skin is then opened to a point near the anus and removed up or over the breech, the knife being used in the process, as shown in figure 7. After a similar opening has been made in the other leg, the skin is removed from between the legs and fisted down over the belly. (Fig. 8.) It is next loosened around the leg and may be rapidly run down to the joint below the



Fig. 4.—"Fisting off" skin over the brisket.

pastern, where the foot is severed. The knife is then passed through the hind legs, between the ankle and hoek. A cord is tied through this opening by which the carcass may be suspended. The animal is then ready to be hung up. (Fig. 9.)

After that the skin is opened down the mid line, then with the point of the knife it may be loosened out over the flank, where extreme care

must be taken not to tear the flank muscles. (Fig. 10.) Beginning in the mid part the skin is next fisted out over the sides up over the thigh and down over the shoulder. (Fig. 11.)

Figure 12 shows the method employed in removing the skin from the sides of the animal; it may be beaten down very rapidly in this



Fig. 5.-Tying the gullet (esophagus).

way. Should any museles begin rolling with the skin, however, the point of laeeration should be worked around and the flesh removed in the opposite direction from which it is tearing. The skin is removed from around the tail with the knife, and then the operator by grasping it with the right hand and pressing the left against the eareass, ean

casily strip it down the back to the neck, where it is usually severed with the knife. The head is then removed at the atlas joint. (Fig. 13.)

Removing the entrails.—In removing the intestines the rectum is first cut around and the colon drawn out from 6 to 8 inches, where it is cut off. Incision is made at the cod or udder and the carcass opened down the middle to the breastbone. It is well to hold the carcass away from the intestine and paunch by inserting the two forefingers of the left hand, then pushing them down so that the abdominal covering may be cut as it is held out by the finger. (Fig. 14.) The



Fig. 6.—Opening skin on hind leg.

intestines and paunch will then drop forward but are held in place by attachment to the back. The caul fat should then be removed. Then by working around underneath the paunch, the gullet may be grasped and withdrawn, after which the intestines may be entirely removed by severing the connection with the back.

Removing the pluck.— The knife should then be inserted into the throat to facilitate the thorough bleeding of the thoracic cavity. (Fig. 15.) This will keep the carcass free from bloodstain when the pluck is removed, which process is accomplished by splitting the breastbone

with the knife and cutting around the diaphragm. The pluck is then free to drop forward and be removed. The forearm is next split and the leader drawn out. After the knee has been bent back, the leader is passed over the lower cannon bone to hold it in position. This gives the carcass a neat, plump appearance. (Fig. 16.)

CARE OF THE CARCASS.

Cooling out.—After the removal of the entrails, the careass should be washed thoroughly with either warm or cold water. Warm water has a tendency to bleach the careass. Cold water should be used in warm weather, as it aids materially in reducing the temperature. The careass should then be wrapped in cheesceloth and hung in a cellar, or any clean, cool place that is free from disagreeable odors.

CUTTING UP THE CARCASS.

The carcass cuts better after it has been thoroughly cooled out, although cooling is not absolutely necessary. Besides the knives used in slaughtering and dressing, the only materials necessary for this work are a saw and a cleaver. (Fig. 17.) The method of cutting generally used is called saddling the carcass. (Fig. 18.) The cut is made so as to leave one rib on the hind quarter or "short saddle." The remainder of the carcass is called the fore quarter or "market rack."

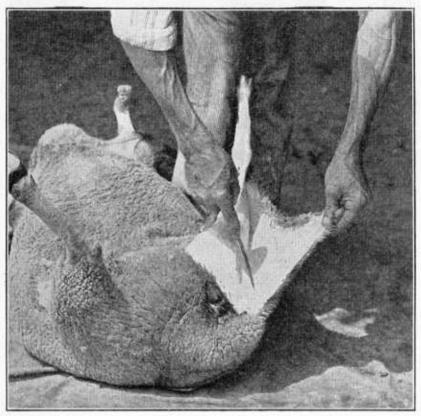


Fig. 7.-Removing skin from the hind leg.

The short saddle is then divided along the backbone, beginning at the tail and splitting the backbone with either the saw or cleaver. (Fig. 19.) The loin should be separated from the leg, leaving 8 to 10 vertebræ in the loin cut, the place depending on the size of leg wanted. All the meat should be cut with the knife, the saw being used only to cut the bones. (Fig. 20.) The loin is then either cut into chops from three-fourths to 1 inch thick or used whole for roasting. (Fig. 21.)

The leg.—The leg is trimmed of the thin flank muscles and the excess fat; the shank is removed a short distance above the hock and

the meat trimmed from it, leaving 1 inch of the lower end of the bone free from covering. Other ways of fixing this cut are to remove the bone at the stifle joint and wrap the meat removed from the shank bone over and skewer it down, or by entirely removing the bone and

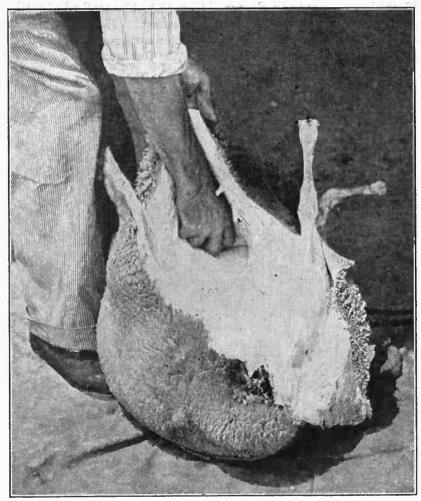


Fig. 8.-" Fisting off" the skin from the belly.

fastening the meat in a roll with skewers. Most of the trade prefer the tail bone left on the roast. Figure 22 shows a leg prepared for roasting.

Fore quarter or "market rack."—The fore quarters are usually divided by sawing down the backbone to the neck, which is then completely severed with the cleaver. (Fig. 23.)

Shoulder.—The shoulder of mutton is lifted by eutting around the fleshy part from the backbone near the neck, back to the fifth rib, and then passing the knife under the shoulder blade. (Fig. 24.)

Boning the shoulder.—In this operation the shoulder is laid on the table with the outside down and the bone removed by eutting around it lengthwise, beginning at the fleshy part just above the knee. A sharp, thin-bladed knife is essential for this work. (Fig. 25.) After the bones are removed the meat is rolled and held in place by skewers or sewed. This makes a delicious roast which is free from bone and therefore easily sliced. (Fig. 26.)

The remainder of the fore quarter is then sawed through on a line parallel to the backbone and about 6 or 7 inches distant from it. The lower part of this cut is ealled the breast and is utilized as stew meat. What is left of this quarter is divided between the fourth and fifth ribs, the portion between the loin and fourth rib being known as "rib cut" or rack. (Fig. 27.) This is usually divided into rib ehops of one

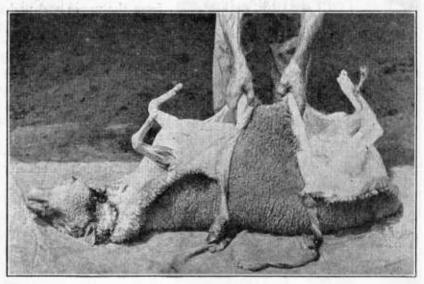


Fig. 9.—Skin entirely removed from belly. Carcass ready to be hung up.

rib each, although it may be used for roasting. When the chops are used without other trimming than the removal of excess fat, they are called "plain rib" chops. They are sometimes trimmed back about 2 inches from the lower end of the rib and are then called French chops. The trimmings are used for stew.

Shoulder chops.—The remaining ribs in this strip are eut into shoulder chops while the neck is used for stew. (Fig. 28.)

CUTTING UP A LAMB CARCASS.

Figure 29 indicates the usual method of cutting up the careass of a lamb. The cuts as they eome in order are: Leg, loin, rack, shoulder, and breast. They are utilized in practically the same way as mutton, and what has been said as to the preparation of mutton is also

applicable to lamb, except as to the boning of the shoulder, which in the case of lamb is done as follows:

The round bone is easily removed by cutting around to the point at which it joins the shoulder blade. The shoulder is next stood on the

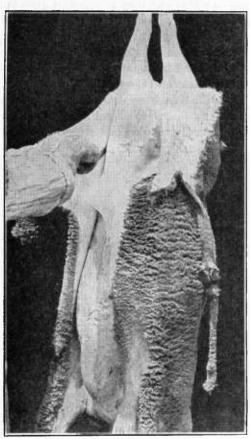


Fig. 10.—Skinning out over the flank.

backbone edge and the shoulder bone is pounded in the joint with the back edge of the cleaver. In this way the cartilage is broken loose around the edge of the blade. by using the steel the opcrator loosens the meat from the upper and under sides. The blade may then be withdrawn from the shoulder, which is easily removed from the backbone and ribs by passing a knife between the bones and the meat. Being thus free from the bone the meat may be roasted and sliced without difficulty. (Fig. 30.)

Another method of boning a lamb shoulder is to remove the ribs first. Then by cutting around the top and back edges of the shoulder the blade and gristle may be removed, after which it is rolled

either with or without stuffing and sewed or fastened with skewers to hold it in place. This is probably the quickest and easiest method of preparing a boned shoulder roast.

HOME CURING OF MUTTON.1

The first essential in euring is to be sure that the meat is thoroughly cooled. The meat should never be frozen, either prior to or during the period of curing. The time to begin curing is when the meat is cooled and still fresh; the proper time is from 24 to 36 hours after killing. Because of the high shrinkage experienced in curing, only large pieces such as the legs and shoulders are suitable for treatment.

¹ Formulas furnished by G. A. Anthony, Animal Husbandry Division.

BRINE-CURED MEAT.

Many different formulas may be used for curing mutton by the brine method, but the recipe given below if followed closely will give good results. For each 100 pounds of meat use:

- 7 pounds salt.
- $2\frac{1}{2}$ pounds sugar or sirup.
- 2 ounces saltpeter.
- 4½ gallons water.

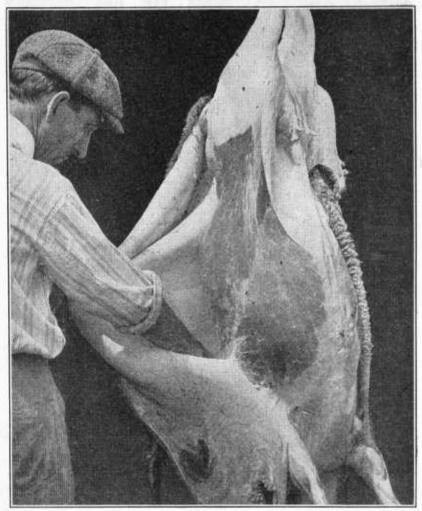


Fig. 11.—"Fisting" skin over side and shoulder.

In warm weather it is better to use 9 or 10 pounds of salt.

All the ingredients are poured into the water and boiled until thoroughly mixed. The brine should be made the day before it is used, so that it will be cool. Place the legs in the bottom of the container, shoulders next; the small cuts should be on top. Be sure

to weight down the contents with a stone or a brick. Iron should not be used, as it will rust. Pour the brine in and be sure it covers the meat thoroughly. In one week pour off the brine and change the meat, placing the top meat on the bottom and the bottom meat on top; then pour the brine back. Repeat this operation at weekly intervals. If the pickle becomes ropy, take out all the meat and

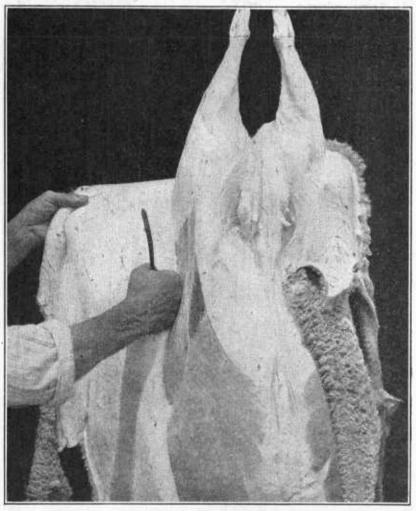


Fig 12.-Pounding the skin down the side.

wash it and the container thoroughly. Boil the ropy pickle or, better, make new pickle. If the old pickle is boiled, it should be strained before boiling.

Allow 3 days' eure for each pound in a leg or shoulder; for example, a 10-pound leg will take 30 days. Smaller pieces take a proportionately shorter time. When each piece of meat has received the proper eure, take it out of the piekle, string, and hang it in the smoke-

house. The temperature of the smokehouse should not exceed 125° F. Smoke the meat until it has a good ehestnut color.

In preparing meats in this manner it has been found more convenient to brine-cure the light pieces and dry-cure all the larger ones. The reason is that the smaller pieces shrink considerably when dry-cured and leave only a comparatively small portion of meat.



Fig. 13.—Removing the head and the hide.

DRY-CURED MEAT.

Dry-cured meat is better for future use than the brinc-eured and requires less work. However, danger from rats and other vermin is less in the case of brine-eured meat. Both methods of curing are very successful if care is taken to see that each operation is executed properly. Following is the method of dry-euring. For each 100 pounds of meat use:

5½ pounds salt.

4 pounds sugar or sirup.

1½ ounces saltpeter.

Mix all ingredients thoroughly, then rub the mixture well over the meat and pack it away in a large crock or jar. The meat can be kept in this pickle indefinitely or until used.

RECIPES FOR COOKING MUTTON AND LAMB.2

MUTTON BROTH.

3 pounds mutton.

2 quarts water.

3 tablespoons rice or barley. Salt to taste.

Fig. 14.—Loosening entrails from the backbone.

generally used in making broth, although other cuts may be used. Remove the outside papery skin from the cut when present and wash well with cold water. Cut the meat into small pieces and remove the excess fat. Put the meat with bones into the kettle and cover with water. Heat gradually to the boiling point and season. Cook slowly until the meat is tender, then strain. and remove fat. Reheat to boiling point and add rice or barley and cook till cereal is tender. If barley is used, it should be soaked over the preceding night in cold water.

The neck, breast, and flank are

MUTTON SOUP.

4 pounds mutton.

3 quarts water.

3 carrots.

2 turnips.

1 small cabbage.

1 stalk celery.

Few sprigs parsley.

1 onion.

6 cloves.

1 sprig thyme.

1 sprig marjoram.

2 tablespoons salt.

Remove the papery skin of the meat, wipe well with damp cloth and cut into small pieces, put into a kettle and cover with water. Bring slowly to boiling point and skim; add vegetables cut into small pieces and other seasoning, and cook slowly for 3 hours. Strain, cool, and remove the fat. Serve either clear with rice or with the other vegetables finely chopped.

CURRY OF MUTTON.

2 pounds mutton.

1 onion.

1 teaspoon vinegar.

2 tablespoons flour.

1 teaspoon curry powder.

Salt.

Boiling water.

² Taken from Farmers' Bulletin 526, "Mutton and Its Value in the Diet."

This dish may be prepared from the neck, flank, chop, trimmings, or breast. Remove fell when present and wipe with damp cloth. Cut into pieces 2 inches square and remove portions of the fat. Fry them out and remove solid portion. Place meat in the remainder and fry to delicate brown. Add sliced onions and pour on barely enough boiled water to cover. Cook until the meat is tender. Add the curry powder, vinegar, and salt. Remove the meat, reduce the broth to 1 cup, and thicken

with flour diluted with cold water. Add meat to gravy and reheat. Serve with rice.

STEAMED MUTTON.

Small pieces of mutton may be cooked very satisfactorily by steaming. Mix the following and spread over the surface, then wrap in cheesecloth and fasten with skewers:

- 1 clove of garlic, finely chopped.
- 1 finely chopped onion.
- 1 teaspoon powdered thyme.
- 1 teaspoon powdered sweet marjoram.
- 1 teaspoon salt.

BRAISED LEG OF MUTTON.

- 1 leg mutton.
- 1 medium-sized onion.
- 1 carrot.
- 1 turnip.
- 1 bay leaf.
- 1 sprig each thyme and parsley.
- t cup mutton drippings or butter.
- 1½ teaspoons salt.
- 12 peppercorns.
- 3 cups hot water.

Have the leg of mutton boned. Wipe, stuff with the mixture described below, sew, and place in a deep pan. Cook the onion (sliced), the carrot, and the turnip (cut into dice), bay leaf, thyme,



Fig. 15.—Draining the thoracic cavity.

and parsley 5 minutes in the butter or mutton drippings. Add the hot water, salt, and peppercorns and pour the mixture over the mutton. Gook slowly for 3 hours, with the dish covered except for the last half hour. Make a brown gravy out of the strained broth in which the meat has been cooked (see below).

STUFFING FOR BRAISED LEG OF MUTTON.

The stuffing for the braised leg of mutton is made as follows:

- 1 cup cracker crumbs.
- 2 tablespoons melted butter.
- 1 teaspoon salt.

- 1 teaspoon pepper.
- ½ teaspoon poultry seasoning.
- 1 cup boiling water.

SHOULDER OF MUTTON BRAISED WITH TURNIPS.

6 pounds of mutton from the shoulder.

1 onion.

1 carrot.

1 stalk celery.

4 cloves.

bay leaf.

1 quart water. 6 turnips.

Salt.

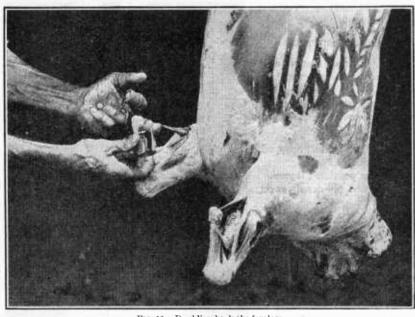


Fig. 16.-Doubling back the forelegs. ~

Cut the onion, carrot, and celery into small pieces and put them with the shoulder of mutton into a deep baking pan. Cover, and allow the mutton juice to permeate



Fig. 17.-Equipment for cutting up the carcass.

the vegetables and brown with them in the oven. Then add the water, cloves, and bay leaf. Cook in a moderate oven until the meat is tender, which will be about 20 minutes for each pound. One hour before serving add the turnips, which have been peeled and parboiled.

BRAISED BREAST OF MUTTON.

1 breast mutton. Few slices bacon.

1 onion. Salt.

1 lemon.

½ pint stock.

Line the bottom of a casserole or other earthcnware baking dish with a few thin slices of bacon, lay the mutton on them, and put over it the lemon, which has been peeled and cut into slices. Cover with 1 or 2 more slices of bacon and add the stock and onion. Cover the dish. Cook slowly on the top of the stove or in the oven until the meat is tender.

ROAST LEG OR SHOULDER OF MUTTON.

Sprinkle the meat with salt and pepper, place upon a rack in the baking pan, and dredge with flour. Bake in a hot oven, basting frequently. Allow 20 minutes to the pound, unless the roast is very small. Reduce temperature sharply to moderate heat as soon as meat has become seared on outside.



Fig. 18.-Removing short saddle.

BROWN GRAVY FOR ROAST MUTTON.

In making gravy for roast mutton or any other roast meat, allow 2 level tahlespoons of fat for each cup of gravy desired, pouring off any in excess of that amount. To the fat add 3 tablespoons of flour for each cup of gravy and cook thoroughly, browning it, hut being very careful not to burn it. Add boiling water or broth and boil for a short time, stirring constantly. Add salt and pepper. The proportions are 2 tablespoons of fat, 3 of flour, and 1 cup of water or stock. If the flour is not browned, only 2 level tablespoons are needed for each cup.

CURRANT-JELLY GRAVY.

A gravy flavored and made acid with currant jelly is often served with roast mutton. To each cup of brown gravy made from the fat of roast mutton add a glass or less of currant jelly. The addition of currant jelly is especially suitable when cold mutton is to be warmed up in gravy.

MUTTON STUFFED AND ROASTED.

For this purpose have either the leg or shoulder of mutton boned. Stuff the boned piece and tie into good shape. Roast in a hot oven, allowing about 20 minutes to the pound. Add to the dressing more fat, unless the meat is very fat. In making the gravy, follow the directions given above.



Fig. 19.—Dividing the rear part.

DRESSING FOR ROAST MUTTON.

- 1 pint stale bread crumbs.
- ½ cup cracker crumbs.
- ½ teaspoon sage.
- 2 tablespoons butter.

1 teaspoon sweet marjoram.

Salt and pepper.

Few drops onion juice.

Cook the bread in cold water; press out nearly all the water, and add the other ingredients,

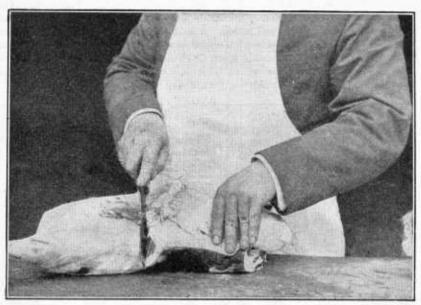


Fig. 20.—Removing the loin.

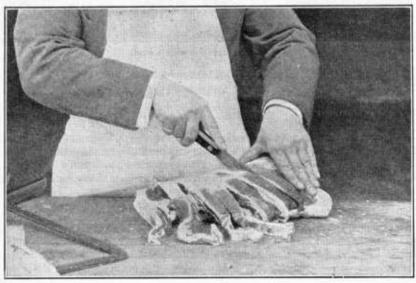


Fig. 21.—Cutting loin chops.

BROILED LOIN CHOPS.

Remove superfluous fat and roll the flank about the tenderloin, fastening it with skewers. Place on a broiler greased with some of the mutton fat. Cook in hot oven 6 to 8 minutes, turning frequently during the first part of the time and reducing the heat as soon as the meat is well seared. A sauce of butter to which a little lemon juice and chopped parsley have been added is sometimes rubbed over the chops. Since the chops themselves contain much fat, lemon juice and parsley only may be used, or the chops may be served on thin slices of lemon. Some people consider onion sauce a great delicacy for serving with broiled chops.

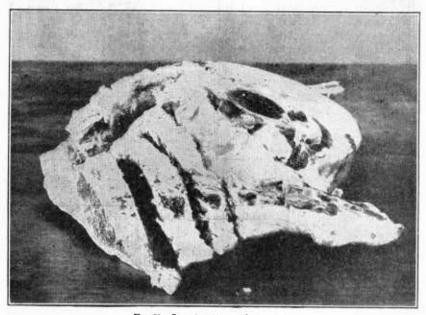


Fig. 22.—Leg of mutton ready to roast.

ONION SAUCE.

8 large white onions. ‡ cup butter. 1 tablespoon flour. 1 teaspoon sugar.

½ cup cream.
Salt.

Cut the onions into 2 or 3 pieces each and cook them for 10 minutes in boiling salt water. Strain and cook in a covered saucepan with the butter for about three-quarters of an hour until they are very tender. Press through a purée sieve and reheat. Sprinkle the flour over them, stirring it in thoroughly, and add the seasoning. Bring to the boiling point and heat long enough to cook the flour thoroughly.

PAN-BROILED LOIN CHOPS.

Pan broiling is a method of cooking when there is no suitable fire for broiling. For best results it should be used only for meat from which most of the fat has been removed. Loin chops which are to be pan-broiled should have the flank and most of the fat removed. After being wiped they should be put into a very hot frying pan and should be turned frequently. If a skillet or griddle is used, do not allow the chops to fry in grease; the pan should be greased enough to prevent sticking but no more. The pan should be very hot at first, and the chops are to be kept moving in order to prevent sticking. In order to avoid piercing the chops in turning them, they should

be grasped between two forks or with a knife and fork. The time of cooking depends, of course, upon the thickness of the chops and whether they are desired well done or not. From 6 to 10 minutes is the usual time. Pressing the chop against the side of the frying pan helps to complete the cooking. Pan-broiled chops may be served plain or with savory, tomato, or onion sauce.



Fig. 23.—Dividing the fore part.

SAVORY SAUCE.

To the fat in the pan in which the chops have been broiled, add butter enough to make about 2 tablespoons. In this, brown 3 tablespoons of flour and add 1 cup of water or stock. Season with salt and pepper and add one-half onion, finely chopped, and 1 tablespoon each of capers and finely chopped pickle.

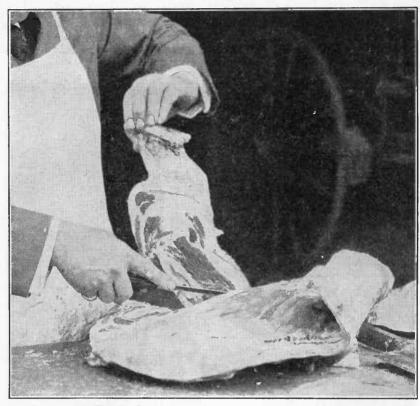


Fig. 24.—Removing shoulder from fore quarter of mutton.

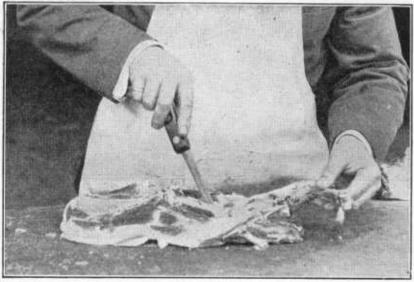


Fig. 25.—Removing bones from mutton shoulder.

TOMATO SAUCE.

2 tablespoons flour. Stewed or fresh tomato enough to	1 stalk celery. 1 sliced onion. Few cloves.
make 1 cup when well boiled down.	Salt and pepper

Cook the tomatoes with the seasonings. Cook the flour thoroughly in the butter, strain the tomatoes, and add to them the butter and flour. Cook all together until smooth, stirring constantly.

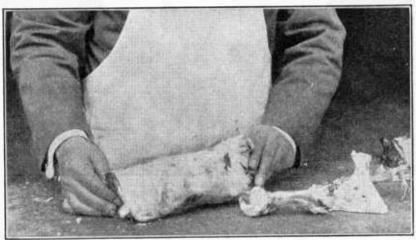


Fig. 26.-Mutton shoulder with bones removed.

LEFT-OVER MUTTON AND LAMB.

MINCED LAMB.

Chop pieces of cold roast lamb fine. It is good served with potatoes or on toast. A pint of chopped meat will serve a family of five or six. Rub 1 tablespoon each of butter and flour together; add ½ pint of milk, stir until boiling; add tablespoon of finely chopped parsley, ½ teaspoon of salt, and a dash of cayenne. Add the meat and stand over hot water until served. If served on toast trim the toast and butter and cover with a thick layer of the mince, making a little hollow in the center. Into this hollow (if you have plenty of eggs and want a heartier dish) put a poached egg. Six will be required for this quantity of meat.

CUTLETS OF COLD MUTTON.

From a leg of mutton which has been cooked rare, cut pieces about the size of an ordinary loin chop. These may be fried in a little fat, or egged, crumbed, and fried in deep fat, or they may be brushed over with fat and broiled. The result is more like meat cooked for the first time than the ordinary warmed-over meat. Cutlets so prepared may be served with any of the sauces suggested for serving with chops.

STEAMED MUTTON AND RICE.

4 cups cooked, or 1 cup raw rice.	Few drops onion juice.
2 cups cooked mutton cut into	1 tablespoon chopped parsley.
small pieces.	½ cup bread crumbs.
1 teaspoon salt.	1 egg.
1 teaspoon pepper.	Stock or water.

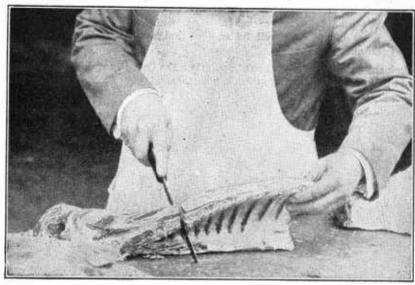


Fig. 27.—Removing rack or rib cut.

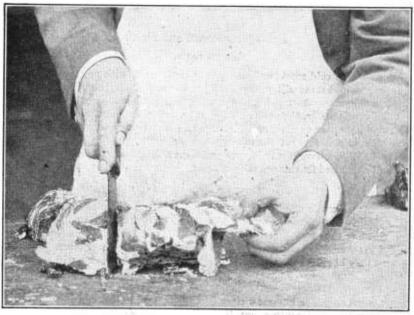


Fig. 28.—Cutting shoulder chops.

Grease a mold or bowl of about $1\frac{1}{2}$ quarts' capacity and line with cooked rice. Heat the meat with the other ingredients, using stock enough to make a mixture that is moist but will hold its shape. Pack the meat in the center of the mold and cover with the remaining rice, grease the cover of the mold (if a bowl is used, a plate will serve for a cover), steam or cook in water enough partly to cover the mold until the contents are thoroughly heated through. Turn it on a hot platter and serve with tomato sauce.

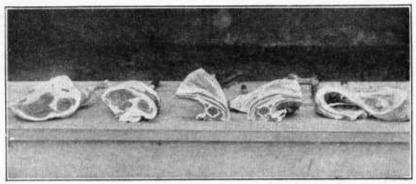


Fig. 29.-Cuts of lamb carcass.

This recipe, it will be noted, suggests the use of bread crumbs instead of flour for thickening, which is often a way of saving bread that might otherwise be wasted; it is also one way of obtaining variety as a different texture results from that when flour is used.

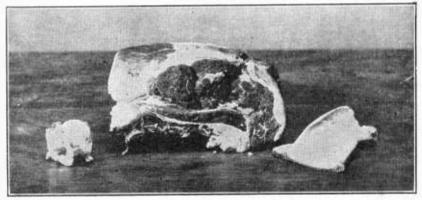


Fig. 30.—Lamb's shoulder with bones removed.

CORNED MUTTON AND ITS USES.

The shoulder is the cut most frequently corned. The leg is delicious corned, but is too expensive to be used in this way except for the purpose of preserving what would otherwise go to waste.

10 pounds mutton.

13 cups salt.

1 tablespoon baking soda.

1 tablespoon saltpeter.

4 cup brown sugar.

Rub the salt thoroughly into the meat, covering every portion, and allow to stand with the salt on it for 24 hours; then pour over it the other ingredients dissolved in a small quantity of lukewarm water. Add water enough to cover the meat and allow

it to stand in the brine for at least 3 or 4 days. Meat thus corned will keep in good condition for a long time. Since mutton absorbs salt more readily than beef, special care should be taken to avoid using too much of it.

Corned mutton may be used in all the ways in which corned beef is used. The broth in which it is boiled makes good soup when seasoned with onion and turnip or other vegetables.

MUTTON SAUSAGE.

Sausage can be made from mutton mixed with pork in much the same way as beef is used for similar purposes. A general formula is: Mutton, 2 parts; lean, fresh pork, 1 part; and fat pork, 1 part; salt and seasoning to suit the taste. Such sausage can be made into cakes and cooked at once or may be packed in skins or bags in the usual way. Homemade sausage is very commonly kept frozen. When this is not possible, it is often convenient to make small quantities for immediate use.

MUTTON SAUSAGE.

1 pound mutton free from bone.	½ teaspoon salt.
½ pound fat fresh pork.	1 teaspoon each marjoram, thyme,
½ teaspoon black pepper.	and sage.

Put the meat through a meat or sausage grinder and mix thoroughly with the other ingredients. Pack in a bag about 2½ inches in diameter and keep in a very cool place. Cut into slices and fry. If it is to be used at once packing in a bag is not necessary; instead the chopped and seasoned meat may be made into cakes.